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FROM THE AMERICAN PEOPLE

ENGINEERING SUPPORT PROGRAM

Contract No. EDH-I-00-08-00027-00

Task Order No. 1

First Quarter Report 2015



January 12, 2015

This publication was produced for review by the United States Agency for International Development. It was prepared by Tetra Tech, Inc.

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January 12, 2015

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Office of Economic Growth and Infrastructure (OEGI)
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**Re: Contract No. EDH-I-00-08-00027-00 / Task Order No. 1
Afghanistan Engineering Support Program (AESP)
First Quarter Report FY2015**

Dear [REDACTED]

It is with great pleasure that Tetra Tech submits this First Quarter Report for fiscal year 2015, as provided in section C.5, "Deliverables," paragraph D of the above referenced Task Order. The FY2015 Q1 report covers the period of October 1, 2014 through December 31, 2014.

This report is the first quarterly report for Year 6 of AESP. The AESP was originally contracted for five years ending on November 8, 2014. The Year 6 extension is authorized pursuant to Task Order Modification No. 23 dated September 24, 2014 that extends the program from November 8, 2014 through November 8, 2015.

As we move into Year 6 of AESP, two shifts of the program are apparent. The first is a recognition of the wealth of information the first five years have generated. Through Year 5, Tt AESP has completed 159 work orders with an additional 16 active work orders in progress through this quarter. It is important that the institutional knowledge gained through completion of these work orders is preserved and applied for the benefit of ongoing USAID initiatives and future projects.

Second, AESP will assume an expanded role in quality assurance, monitoring, and evaluation. These services will focus on USAID projects that are moving into the design and implementation phases. The most prominent project will be the implementation of the [REDACTED] NEPS-SEPS electrical transmission connector between Kabul and Kandahar. The NEPS-SEPS connector will be completed on budget through the Afghanistan's national electric utility Da Afghanistan Breshna Sherkat (DABS).

We look forward to continuing our support of the USAID OEGI mission in 2015, and to strengthening our partnership while building a brighter future for Afghanistan.

Please contact me at your convenience should you have any questions or comments regarding this report.

Respectfully,
Tetra Tech, Inc.

[REDACTED]

Chief of Party (AESP)

AFGHANISTAN ENGINEERING SUPPORT PROGRAM

Contract No. EDH-I-00-08-00027-00
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DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

PROJECT OVERVIEW

The Tetra Tech (Tt) Afghanistan Engineering Support Program (AESP) provides planning, design, engineering, and technical oversight support while contributing to local national capacity building and mentoring through collaboration/coordination with the United States Agency for International Development (USAID), Afghanistan Office of Economic Growth and Infrastructure (OEGI). Tt AESP performs activities that complement and reinforce the activities and engineering expertise of USAID OEGI staff in: Energy, Transportation, Vertical Structures, Water and Sanitation sectors.

Tt AESP consists of a Kabul-based core of expatriate engineering professionals leading a competent staff of local Afghan engineers and support professionals, including home office, or “reachback”, support from highly-qualified US-based staff. Our local team continues to display adaptability, mobility, and responsiveness to the needs of USAID.

- Activity Start Date: November 9, 2009
- Activity End Date: November 8, 2015
- Prime Implementing Partner: Tetra Tech
- Teaming Partners/Sub-awardees: Power Engineers, GardaWorld, USACC, SMART Engineers
- Geographic Coverage: Afghanistan, See Figure 1 below

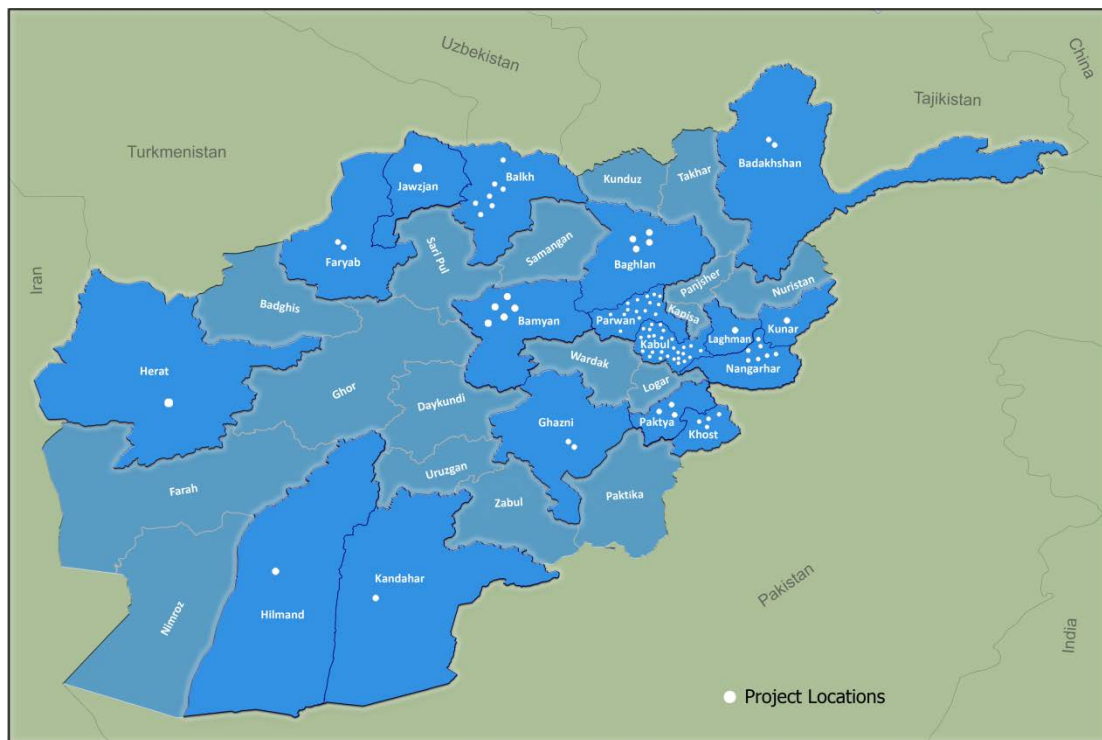


Figure 1 2009 – 2015 Tt AESP Project Location

EXECUTIVE SUMMARY

This report covers the period from October 1, 2014 to December 31, 2014. During this period, Tt AESP submitted 188 deliverables.

Key deliverables this quarter include the design analysis and redesign of the Gardez-Khost Road Bridges No. 9 and No. 10 and three Technical Scope of Work reports. These reports outline the technical designs and specifications for NEPS-SEPS Substations and Transmission Lines that connect the electrical grid between Kabul and Kandahar.

FY 2015 first quarter deliverables also include hundreds of submittal reviews for the Gardez-Khost (GK) Road construction. In addition, Tetra Tech submitted three comprehensive Technical Sections to support engineering, procurement, and construction for Requests for Proposals (RFPs) by Da Afghanistan Breshna Sherkat (DABS) and USAID OEGI. The completed projects will improve power distribution in the NEPS-SEPS electrical grids. The estimated value of electrical RFPs produced this quarter is [REDACTED]

Highlights of the quarter within each sector and technical support and oversight services noted below exemplify AESP's diverse support of the USAID OEGI mission in Afghanistan.

Summary of Results for the Reporting Period and Key Accomplishments

Energy Sector

Increasing access to electricity has remained a top economic priority for Afghanistan. Access to electric utility services and expansion of the electrical transmission grid serving Afghan population centers is an expedient and cost effective approach to improve the lives of citizens in Afghanistan. Tt AESP has supported such efforts through a number of energy related work orders this quarter and has continued providing direct support to DABS on energy related tasks as described below.

The majority of recent Tt AESP work, and a priority for USAID OEGI, has been long term work order LT0048 Engineering Study for the 220kV Transmission Line NEPS-SEPS. The existing Northeast Power System (NEPS) is a 220KV transmission system that extends low cost power from Uzbekistan and Tajikistan over the Salang Pass to Pul-e-Khumri in northern Afghanistan, and then to the Arghandi Substation just outside Kabul. The LT0048 project developed engineering and bidding documents to engineer/design, procure, construct, and commission seven new substations between Arghandi and Kandahar East. This includes a new 450 km double circuit 220 kV transmission line (T/L) that when complete will connect the Northeast Power System (NEPS) to the Southeast Power System (SEPS) at Kandahar East.

The LT0048 work order, that started in 2012, has six amendments which taken together are responsible for design and development of technical specification sections and RFP commercial sections for DABS to use during bidding. The last of AESP's NEPS-SEPS design work was completed this quarter, including the completion of Technical Scopes of Work and Technical Section documents that were included in separate Transmission Lines and Substations RFPs for DABS to advertise for bids. When complete, the total cost for construction of the NEPS-SEPS connector will equal approximately [REDACTED] including the Arghandi to Ghazni portion previously designed by AESP that is currently underway.



Figure 2: Khandahar Northwest Substation. The substation's facilities were studied and AESP offered recommendations for upgrading the equipment as part of WO-LT0059.

Work also continued on long term work order LT0059 this quarter. This work order provides recommendations for servicing or replacing equipment throughout the Kabul medium voltage distribution system and for upgrading the existing facilities at the NEPS Kabul North and Kabul Northwest substations. This quarter, Tt AESP completed work on LT0059 Amendment 3, Task 2 giving recommendations for upgrades and revisions at these substations.

Along with long term work orders LT0048 and LT0059 described above, AESP also supported significant work at the Tarakhil Thermal Power Plant (TPP) through long term work order LT0070. The LT0070 work order provides design, engineering, operational support and technical assistance services to USAID and DABS through four open amendments and two pending amendments. Work this quarter includes providing technical assistance to Phoenix IT Solutions, Ltd (Phoenix) and DABS for inventory of critical spare parts. Tt AESP also initiated SCADA upgrades in the TPP control systems, and provided technical assistance for creating a SCADA/CMMS Interface. Additionally, Tt prepared and submitted a report providing recommendations for the repair and re-commissioning of existing TPP firefighting system. Tt will submit separate fire brigade training documents early next quarter.

Transportation

Tt AESP had four active transportation work orders this quarter; most dealing with design and submittal reviews, technical analyses, and design plans.

AESP previously subcontracted for the performance of as-built survey and geotechnical investigations at Parun Road in Nuristan province. The subcontractors evaluated the previous construction progress and the soils at the Parun Road site. Based on the results of these evaluations, Tt AESP prepared a new Statement of Work (SOW) along with revised plans, specifications, and BOQ for completion of the Parun Road improvements. These included drainage, road graveling, and lighting reconstruction work. This work was completed as part of long term work order LT0009 Amendment 7.

Based on the results of a scour analysis that Tt previously performed for Bridge 10 on the Gardez to Khost (GK) Road, Tt was tasked with providing a redesign of Bridge 10 to accommodate actual storm flows and prevent future scour related damage to the proposed new bridge structure. The previously redesigned Bridge 9 bearings, footings, and scour protection were also revised to reduce construction costs and be consistent with the new Bridge 10 redesign. This design work was completed under AESP long term work order LT0077 Amendments 2 and 4, and these work products were submitted to USAID and their contractor Mashriq Engineering Construction Company (MECC) this quarter.

Under long term work order LT0084, Tt AESP continued its review of construction submittals for the Gardez to Khost Road Phase IV project during this quarter. In addition to the review of technical construction submittals, Tt also participated in bi-weekly meetings with USAID, MECC, and IRD-EQUALS to evaluate and expedite GK Road construction progress and resolve any issues related to the roadway construction or MECC's technical submittals.

Vertical Structures

This quarter AESP had two active work orders in the Vertical Structures sector. Tt's vertical structures civil engineers also provided support on electrical and transportation work orders as needed.

Under long term work order LT0082 Engineering Support for FoHE, Tt AESP was tasked by USAID to perform a design review of the proposed new Sabez School located in the Adraskan District of Herat Province, Afghanistan. The Sabez School design was prepared by others, but before moving forward USAID wanted AESP to review the proposed school design for conformance with International Building Code's (IBC) structural and seismic requirements. The Tt AESP results were presented in a technical memo that included a description of the overall design review methodology and final conclusions. This design review technical memo was submitted to USAID on December 7, 2014.

Under long term work order LT0089, Tt AESP developed a SOW/ROM to provide mechanical engineering QA services for the USAID supported, 100-bed and 20-bed hospital construction projects in Gardez and Khair Kot, respectively. The proposed engineering services consist of providing QA

inspection, monitoring and evaluation services for the mechanical equipment and systems at the Gardez and Khair Kot hospitals.

Water Resources

This quarter AESP had one active work order in the Water Resources sector. Administrative work order (A) 0098 analyzed existing data to determine the feasibility of using an Aquifer Recharge System (ARS) in the Kabul River Basin. After receiving comments on a draft submittal from USAID, Tt revised and submitted a final technical memo on November 29, 2014.

Technical Support and Oversight

Technical Support and Oversight is a type of work order that has evolved as AESP progressed to present day. Technical Support and Oversight includes all work orders that do not fit under specified categories defined in the original AESP Task Order or that crossover multiple sectors. Technical Support and Oversight has allowed AESP to showcase its flexibility, mobility, depth of activities, relevance to the USAID Afghanistan mission, and commitment to capacity building and gender equality.

Technical Support and Oversight generally are work orders that allow AESP to fill gaps in USAID programming as they arise. This quarter AESP worked on three long term Technical Support work orders. Two of the three work orders, LT0065 and LT0086, remained open on a per request basis to provide media assistance to USAID activities and claims analysis that may arise on the USAID Kajaki Dam project. Although available, USAID did not request any support under these work orders during this quarter.

The Afghan Women Internship Program under long term work order LT0042 exemplifies AESP's commitment to capacity building and gender equality. This quarter marked the end of the third year of this successful internship program. The third year covered the entire 2014 academic year.

The AESP Afghanistan Women Internship Program encourages women entering their fourth year of university engineering education to pursue a career in engineering by providing opportunities for on-the-job training, providing real world engineering experience. Four woman engineering students participated in the program this quarter, and they were especially proud of their work on active AESP work orders. As in previous years, AESP will hire one of the interns fulltime at the beginning of the next quarter. AESP is currently developing a SOW and ROM for continuing LT0042 through the 2015 academic year.

Constraints and Critical Issues

Although mobile security concerns never prevented the Tt AESP from completing its mission this quarter, nonetheless security concerns remained a significant factor for planning AESP work in-country.

Conference facilities at the Tt Villa in Shash Darak remained available and a practical option for USAID to hold business meetings with other implementing partners and Afghanistan stakeholders away from otherwise insecure locations. Having the Tt Villa available for these meetings mitigates the security risks associated with travel around Kabul during periods of unpredictable insurgent activity. Tt AESP will continue hosting USAID meetings so long as the project is active.

Summary

As described above, Tt AESP has provided USAID OEGI with diverse engineering expertise and dynamic support for USAID goals and objectives throughout the first quarter of Year 6. The versatility of the Tt AESP program is evident in the variety of services and deliverables submitted to USAID OEGI this quarter. Going forward, Tt AESP will remain responsive, mobile and relevant in the remaining quarters of FY2015, and will continue to perform work orders issued by USAID OEGI that provide needed technical services, capacity building, and gender equality opportunities in Afghanistan.

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1.0 ACTIVITY IMPLEMENTATION

1.1 KEY ACTIVITIES ACCOMPLISHED DURING THE QUARTER

Tt AESP is responsible for identifying, planning, designing and providing technical support and oversight of USAID OEGI infrastructure projects and related engineering activities. This is done in accordance with the basic USAID OEGI Architect and Engineer (A&E) IQC contract statement of work, which creates work orders to track individual projects. Work orders fall into one of two categories, administrative or long-term. Administrative work orders are defined as tasks requiring a total level of effort (LOE) less than or equal to 18 business days (144 work hours). Long-term work orders are defined as activities requiring a total LOE exceeding 18 business days. For long-term work orders, Tt AESP prepares and submits a Scope of Work (SOW) and Rough Order of Magnitude Cost Estimate (ROM) for each long-term work order.

Tt AESP supports USAID OEGI's mission throughout Afghanistan using both administrative and long term work orders. For tracking purposes, work orders are broken into one of the following sectors; Energy, Vertical Structures, Transportation, Water Resources, and Water and Sanitation, as stated in Tt AESP's IQC. If a work request falls outside the sectors above, it is classified as Technical Services. This quarter Tt AESP worked on 12 work orders in the Energy sector, 2 work orders in Vertical Structures, 4 Transportation work orders, 1 Water Resources work order, and 3 work orders in Technical Services across multiple sectors. Accordingly, the majority of AESP work orders and subsequent work was related to the energy sector.

Table 1.1 below describes the work order activities performed during the first quarter.

1.1.1.1 Table 1.1 Summary of Work Completed During the First Quarter FY 2015

Number	Work Order Title	Summary of Work Completed
WO-A-0098	Kabul Basin Aquifer Feasibility Study	Tt reviewed existing technical documentation to determine if a full feasibility study addressing the implementation of an Aquifer Recharge System (ARS) in the Kabul River Basin would be a logical step forward. Tt submitted a Technical Memo which includes a discussion of key pre-feasibility study elements and data requirements needed to move forward on November 29, 2014. This work order was completed this quarter.
WO-A-0099	SEPS Completion GFE Inventory	Utilizing the mobility of AESP, USAID requested the deployment of Tt staff to provide an inventory of government furnished equipment. A team was mobilized to Kandahar on December 3, 2014 and they completed an initial inventory of equipment on site.
WO-LT-0009 AMD 7	Parun Road Graveling and Lighting Reconstruction	Tt received NTP on July 8, 2014 to provide project evaluation and supervision services in connection with the Parun Road construction in Nuristan Province. During this quarter, Tt prepared a detailed Statement of Work, updated plans, specifications and BOQ for the completion of the Parun Road project based upon verification of the existing project status and geotechnical investigations performed at the site.

WO-LT-0042	Afghan Women Internship Program	Tt developed a curriculum and schedule for the Afghan Women Internship Program. Interns spent much of this quarter participating in training, shadowing events, meetings, software training, asphalt training, cost estimation training, and on-the-job training. The interns were asked to participate in some basic engineering work for several work orders. Four women participated in the 2014 program. AESP has submitted and is currently revising a SOW and ROM for the 2015 intern program.
WO-LT-0048 AMD 4	Qarabagh to Kandahar East Substations	USAID OEGI requested a work order to create and deliver a technical section for the proposed substations in Qarabagh, Moqor/Gelan, Shah Joy, Qalat, and Kandahar East. AESP submitted the Technical Section 6 with RPC as an RFP addendum on December 21, 2014.
WO-LT-0048 AMD 5	Transmission Line from Ghazni to Kandahar East	USAID OEGI requested a work order to create and deliver the “Technical Section 6” for the proposed transmission lines from Qarabagh to Kandahar East. AESP submitted a Technical Scope of Work on November 27, 2014. AESP also delivered the “Technical Section 6” to incorporate into the DABS RFP for advertising next quarter.
WO-LT-0048 AMD 6	RPC At Kabul and Kandahar East	USAID OEGI requested a work order to provide engineering support to the build out of the 220kV Northeast Power System (NEPS) to the Kandahar East electrical power distribution system (part of the Southeast Power System or SEPS). Tt submitted a Technical Memo on November 13, 2014 and a Technical Specifications Report on December 15, 2014. Furthermore the work on this amendment was rolled into the “Technical Section 6” for Amendment 4 as an addendum to be incorporated into the DABS bidding documents.
WO-LT-0048 AMD 7	SEPS completion	USAID requested the development of a SOW and ROM on September 24, 2014 for a plan to complete the SEPS project. COR SOW/ROM NTP was received on October 29, 2014. Currently, Tt is preparing a SOW and ROM for this work order.
WO-LT-0059 AMD 3	NEPS Kabul Area Substation Assessments	USAID OEGI requested a work order to provide further assessments of Kabul North, Northwest, and MW Radio Substations to identify other deficiencies beyond the protective relay coordination scope of WO-LT-0059 Task 14. The assessments are to include a review of components that are old, obsolete, or in need of repair on the HV and MV systems. These include circuit breakers, switchgear, and conductors. The assessments provide recommendations and technical documents to implement the upgrades and revisions. Task 1

		Assessments and Recommendations Report was submitted on November 11, 2014. NTP was received on December 10, 2014 for the remainder of Amendment 3 tasks expected to be completed during the next quarter.
WO-LT-0063 AMD 4	Salang Tunnel SS Pre-Purchase Specs	Pre-Purchase#1 and #2 are approved by USAID. DABS to finalize the procurement of equipment.
WO-LT-0063 AMD 6	Salang Tunnel SS Detailed Design	Salang Tunnel detailed design and specifications have been incorporated into RFPs for advertising during third quarter. NTP has been giving for DABS to advertise for bids.
WO-LT-0063 AMD 7	Salang Tunnel Substation Gas Insulated Switchgear Redesign	USAID technical POC requested the development of a SOW and ROM on August 18, 2014 to redesign the Salang Tunnel Substation using GIS. After considerable analysis, AESP issued a No-Go Decision Memo to USAID on December 1, 2014 recommending the cancellation of this amendment. Subsequently, this amendment was cancelled this quarter.
WO-LT-0065	Media Assistance	In the past, Tt supported USAID Office of Economic Growth and Infrastructure (OEGI) and the Development Outreach and Communication Office (DOC) under this work order. The Tt AESP Team has met with interviewees and captured interviews on video. The videos are available. Further media assistance is available.
WO-LT-0070 AMD 2	Firefighting Analysis	Tt reviewed all documentation regarding the existing fire suppression systems installed at Tarakhil Thermal Power Plant. Including all available as-built drawings, design calculations, test results, inspection/maintenance reports for the automatic sprinkler and foam suppression systems. Tt submitted its Fire Fighting Analysis report on September 29, 2014 and will submit separate fire brigade documents early next quarter.
WO-LT-0070 AMD 4	Tarakhil Power Plant Power Block A, B and C Controls Repair	Tt submitted a SOW and ROM to USAID on July 7, 2014 and received NTP for tasks 1&2 on July 27. The SOW/ROM was revised during the fourth quarter, and USAID issued NTP for the revised controls repair work. The work order remained open during this quarter, and work is progressing on the TPP SCADA upgrade. Tt also submitted a SCADA Tech Memo on December 1, 2014 and is waiting on Phoenix for procurement of SCADA Hardware, software and UPS equipment.
WO-LT-0070 AMD 5	Tarakhil Power Plant Alternative Fuel Source Study	Tt fulfilled a USAID request to write a fuels study SOW and ROM for an alternative fuel source at the Tarakhil power plant. Tt submitted a revised SOW/ROM for the study on December 24, 2014.

		Additional SOW/ROM comments have since been received and Tt is preparing a revised SOW/ROM.
WO-LT-0070 AMD 6	Phoenix Support at Tarakhil	Tt was directed to provide technical assistance to Phoenix at the Tarakhil Power Plant for equipment inventory and other support. Tt submitted the inventory list on November 19, 2014 and a SCADA BOQ and Installation Diagrams on November 26, 2014. Work is currently ongoing.
WO-LT-0070 AMD 7	Tarakhil Power Plant CMMS/SCADA Interface	Tt received a request from the technical POC at USAID to develop a work order on October 7, 2014 for the development of a SCADA/CMMS Interface at the Tarakhil Power Plant. The work order is waiting for a phoenix decision on CMMS details and is currently pending.
WO-LT-0072	Power System Analysis of Proposed NEPS Improvements	The objectives of this work order are to identify, analyze, and document the impacts of ongoing, planned, and potential projects in the NEPS over time through 2032. After examination of the study plan, USAID requested World Bank to complete this work since it relates more to WB activities than USAID. Consequently, this work order was closed on October 27, 2014 this quarter.
WO-LT-0077 AMD 2	Gardez to Khost Bridge No. 9- Hydrological, Roadway and Bridge Design and Bid Services	Tt received NTP on January 4, 2014 to prepare a 100% detailed design of the Bridge 9 replacement. This quarter, Tt submitted revised Bridge 9 bearing and footing design drawings on October 28, 2014 and a final BOQ and Design Analysis on December 14, 2014. Work on this work order was completed this quarter.
WO-LT-0077 AMD 4	Gardez to Khost Bridge No. 10 Bridge and Roadway Redesign Services	The objective of this work order was to redesign Bridge 10 and deliver construction drawings and specifications to USAID. AESP submitted Bridge 10 redesign drawings and SPECS on October 14 and a final BOQ and Design Analysis on December 14, 2014. Work on this work order was completed this quarter.
WO-LT-0078	NEPS Kabul Area Distribution Master Plan	Tt developed a Scope of Work to deliver to USAID a master planning road map. The plan would allow DABS to initiate expansions and seek donor support to develop an integrated Medium Voltage, 110kV High Voltage, and 220kV High Voltage power distribution system throughout Kabul. Tt submitted a SOW and ROM on February 24, 2014 and is awaiting NTP from USAID. This work order is suspended and awaiting further directive from USAID.
WO-LT-0079	Transformer Rewinding Facility Assessment	Tt developed a Scope of Work for assessment of the DABS transformer rewinding facility, including development of equipment and machinery lists, specifications for upgrade, and

		development of a concept design and budget for plant refurbishment. Tt completed a field investigation under task 1 of this work order. Tt submitted a memo documenting fulfillment of Task 1 to USAID on July 27, 2014. Task 2 Report, Drawings and Cost Estimates were submitted on September 21, 2014. This work order was completed and closed this quarter.
WO-LT-0080	Meter Box and Low Voltage Distribution Panel Manufacturing Facility Assessment	Under this work order, Tt provided manufacturing facility assessments. The objective was to identify needed facility modifications and equipment required at DABS' Meter Box and Low Voltage Distribution Panel Manufacturing Facility. Further goals were to make the facility fully functional based on current and future production requirements. Tt completed a field investigation. A Technical Memo to identify the results of this field investigation was submitted on June 28, 2014. This work order was completed and closed this quarter.
WO-LT-0081	Concrete Pole Manufacturing Facility Assessment	Under this work order, Tt provided a manufacturing facility assessment. The facility assessment identified the facility modifications and equipment required at DABS Concrete Pole Manufacturing Facility to make the facility fully functional based on current and future production requirements. Tt completed a field investigation submitted a Technical Memo to identify the result of this field investigation on 07/22/2014. Tt submitted its Task 2 Report to USAID on September 27, 2014. The work order remained open after submittals were made. This work order was completed and closed this quarter.
WO-LT-0082	Engineering Support FoHE	Tt submitted a SOW and ROM to USAID on April 16, 2014 and received NTP on May 18, 2014. Tt reachback completed a design review of Sabez School on December 7, 2014. This work order is open contingent on USAID identifying and forwarding additional assignments.
WO-LT-0083	Kandahar Solar Photovoltaic Feasibility Study	Tt expects to support USAID with a high level desktop study of photovoltaic options to replace approximately 30% of the kWh of diesel-generated power with solar power.
WO-LT-0083 AMD 1	Kandahar Area Design Optimization with Turbo Generators	Tt submitted a SOW and ROM to USAID on September 15, 2014. Tt is Awaiting COR direction for SOW/ROM revisions. This work order is currently pending.
WO-LT-0083 AMD 2	Kandahar Area Design Optimization with Turbo Generators	Tt submitted a SOW and ROM on September 7, 2014. Task 1 field assessments are completed and Tt is progressing on Task 2. Tt is expecting to

		submit a Task 2 report at the beginning of the next quarter.
WO-LT-0084	Gardez to Khost Road Phase IV	It continues to support OEGI through the review of Contractor submittals for Phase IV of the GK roadway construction. Review of RFAs and attendance at bi-weekly review meetings have been ongoing through the quarter. It has reviewed more than 300 submittals to date, many of these are resubmittals of rejected RFAs.
WO-LT-0089	Gardez and Khair Kot Hospital Mechanical QA Services	COR requested the development of a SOW and ROM on December 7, 2014 for CHEF Gardez and Khair Kot Hospital Mechanical QA services. It is currently working on the SOW and ROM for this work order.
WO-LT-0090	NEPS-SEPS Interim QA Monitoring and Evaluation Services	USAID COR requested the development of a SOW and ROM on December 8, 2014 for interim Quality Assurance Services for various NEPS-SEPS projects. It is currently developing a SOW and ROM.

1.2 KEY ACTIVITIES PLANNED FOR NEXT REPORTING PERIOD

Table 1.2 below describes the activities planned for the second quarter. Actual work performed will be described in detail in the second quarter report.

1.2.1.1 Table 1.2 Summary of Work Planned for the Second Quarter FY 2015

Number	Work Order Title	Summary of Work Planned
WO-LT-009 AMD 7	Parun Road Field Support	Work will continue with subcontractor support during the second quarter.
WO-LT-042	Afghan Women Internship Program	The internship program will continue with additional on-the-job training. The WO will continue with Amendment 4 throughout the 2015 academic year.
WO-LT-048 AMD 5	Transmission Line from Ghazni to Kandahar East	Work will continue to provide technical support of the RFPs during the second quarter.
WO-LT-059 AMD 3	NEPS Kabul Area Substation Assessments	It will submit the assessments during the second quarter.
WO-LT-063 AMD 6	Salang Tunnel Detailed Design	It will assist DABS, prior to contract award, to perform bidding assistance.
WO-LT-070 AMD 2	Firefighting Analysis	It will submit fire brigade documents at the beginning of the second quarter.
WO-LT-070 AMD 4	Tarakhil Power Plant Power Block A, B and C Controls Repair	It will assist Phoenix in updating SCADA hardware in the second quarter.
WO-LT-083	Kandahar Solar Photovoltaic Feasibility Study	It expects to support USAID with a high level desktop study of photovoltaic options to replace

		approximately 30% of the kWh of diesel-generated power with solar power.
WO-LT-084	G-K Road Phase 4	Tt will support the G-K Road Phase 4 construction through design reviews during the rest of FY2015.
WO-LT-089	Gardez and Khair Kot Hospital Mechanical QA Services	Tt will develop the SOW and ROM and begin initial work on this work order in the second quarter.
WO-LT-090	NEPS-SEPS Interim QA Monitoring and Evaluation Services	Tt will develop the SOW and ROM and fulfill staffing needs. AESP will also begin initial work on this work order in the second quarter.

1.3 LESSONS LEARNED

Following sound development practices, AESP submits an evaluation form after the completion of all work orders. This quarter ten evaluations have been requested however, no completed evaluations have been returned by December 31, 2014. These evaluations form the basis of Tt's analysis for lessons learned and allow for continuous improvement of AESP's work.

1.3.1 Evaluations/Assessments/Audits

The USAID Financial Audit which began during the last quarter of FY 2014 was finalized during this quarter. The audit was conducted by Davis and Associates. The audit reviewed Tt's response to the FY2013 Crowe Horwath audit noted in AESP's FY2014 Annual Report. These findings noted AESP had implemented proper corrective actions, except for finding number 10 on FSRS reporting. Tt has been working with USAID OAA since this finding was indicated, and a resolution still has not been found. The summary of findings concerning Tt's response to the previous audit are described in Table 3.1 below. The summary of the new report findings, Tetra Tech responses and planned actions are described in Table 3.2 below.

1.3.1.1 Table 3.1: Audit Summary Review of Tt's Response to AESP Crowe Horwath Audit Report

Number	Prior Audit Findings	Tt Response to Prior Audit	FY 2014 Audit Finding
1	Base salaries of expatriates were charged to project before the approval of Contracting Officer.	Since this occurrence during year 1 of the project, Tetra Tech has taken the steps necessary to ensure no employee charges to the contract without receiving prior written approval from USAID. To date, 48 expat staff have worked on the AESP project and since July 21, 2010 not a single instance of an employee charging to the project without prior approval has occurred	We reviewed the documentation provided by Tetra Tech and performed certain Audit procedures on this documentation. We determines tetra Tech had a process in place to ensure that only authorized personnel with prior approval charged to the contract. We concluded that Tetra Tech put in place the proper corrective actions
	Log book for generators fuel	On AESP, our routine management controls and targeted record keeping results	We reviewed the documentation provided by Tetra Tech and performed certain Audit

Number	Prior Audit Findings	Tt Response to Prior Audit	FY 2014 Audit Finding
2	consumption was not maintained.	in an accurate accounting of diesel fuel cost without incurring the cost of maintaining a logbook of generator diesel fuel consumption. Although a log book is not required by the AIDAR or FAR or by the Prime Contract's or Task Order's terms and conditions, Tetra Tech will maintain a formal log book if directed by the Contracting Officer. If needed, Tetra Tech will request prior approval from the Contracting Officer to incur additional cost and fee for implementation.	procedures on this documentation. While Tetra Tech stated that is believed that the prior auditors had incorrectly applied this requirement- Tetra Tech is required to maintain the proper accountability over the commodities purchased under the contract. We determined that the alternative records maintained by Tetra Tech are sufficient to provide proper accountability over the commodity. We concluded the Tetra Tech put in place proper corrective actions.
3	Time In & Time Out record of subcontractors' labor was not maintained	Tetra Tech's time keeping policies are in accordance with commonly used practices in similar organizations; is in compliance with the US Defense Contract Audit Agency (DCAA); and subcontractors' employees pay is set according to a daily pay rate rather than hourly. Tetra Tech will maintain a record of Time In and Time Out of subcontractor labor hours in compliance with the direction of the Contracting Officer. If needed, Tetra Tech will request prior approval from the Contracting Officer to incur additional cost and fee for implementation.	We reviewed the documentation provided by Tetra Tech and determined that their actions and policies and procedures represented sufficient controls. We concluded the Tetra Tech put in place proper corrective actions.
4	Daily time keeping record of subcontractors' employees were not approved by the Chief of Party	As described above, Tetra Tech and its subcontractors do comply with the subcontract clause 3.5 of Part 3 of the subcontract between Tetra Tech and its subcontractors. The Chief of Party will continue to review and approve all subcontractor invoices in the Kabul office that contain costs incurred	We reviewed the documentation provided by Tetra Tech and determined that their actions and policies and procedures represented sufficient controls. We concluded the Tetra Tech put in place proper corrective actions.

Number	Prior Audit Findings	Tt Response to Prior Audit	FY 2014 Audit Finding
		from subcontractor employee timesheets. Tetra Tech will maintain Chief of Party approved daily time keeping records of subcontractor employees in compliance with the direction of the Contracting Officer. If needed, Tetra Tech will request prior approval from the Contracting Officer to incur additional cost and fee for implementation.	
5	Performance reports were not attached/prepared for the contracts of more than US \$30,000	Tetra Tech has completed Performance Reports on subcontracts of more than \$30,000 where there is no other separate quality assurance / quality control process for A-E services deliverables. Tetra Tech will complete performance reports on subcontracts of more than \$30,000 in compliance with the direction of the Contracting Officer. If needed, Tetra Tech will request prior approval from the Contracting Officer to incur additional cost and fee for implementation.	We reviewed the documentation provided by Tetra Tech and determined that their actions and policies and procedures represented sufficient controls. We concluded the Tetra Tech put in place proper corrective actions.
6	Invoices were not approved by the Chief of Party	Tetra Tech will have subcontractor invoices approved by the Chief of Party in compliance with the requirements of the Federal Acquisition Regulations, AIDARs, Prime Contract, Task Order, and direction of the Contracting Officer.	We reviewed the documentation provided by Tetra Tech and determined that their actions and policies and procedures represented sufficient controls. We concluded the Tetra Tech put in place proper corrective actions.
7	Delivery receipts for the vehicles purchased were not prepared / attached	Tetra Tech will provide delivery receipts for vehicles purchased in compliance with the requirements of the Federal Acquisition Regulations, AIDARs, Prime Contract, Task Order, and direction of the Contracting Officer.	We reviewed the documentation provided by Tetra Tech, including the listing of all inventory procured under the project and determined that their actions and policies and procedures represented sufficient controls. We concluded the

Number	Prior Audit Findings	Tt Response to Prior Audit	FY 2014 Audit Finding
			Tetra Tech put in place proper corrective actions.
8	Sound commercial practices including competition not used for the selection and evaluation of subcontractors	Tetra Tech will continue to follow sound commercial practices in the selection and award of subcontractors in compliance with the requirements of the Federal Acquisition Regulations, AIDARs, Prime Contract, Task Order, and direction of the Contracting Officer. Tetra Tech will request that the Contracting Officer place written Consent to Subcontract statements and list our named teaming partners / subcontractors in the text of the Task Orders issued by USAID.	We reviewed the documentation provided by Tetra Tech. Tetra Tech's assessment that it is not subject to the competitive procurement requirements due to type of contract is not correct. All federal contracts are subject to the requirements for competitive procurement. Tetra Tech did however put in place the proper requirements to address competitive procurement. We concluded the Tetra Tech put in place proper corrective actions.
9	Excluded Parties List System (EPLS) review conducted after award of contract to Subcontractors	Additional training of the AESP project office CCN Procurement staff in procurement and contract compliance practices has been implemented, along with enhanced periodic quality assurance reviews of all procurement and subcontract management files. Such training will be standard operating practice on all future USAID task orders. Tetra Tech will ensure that EPLS review will be performed in compliance with the requirements of the Federal Acquisition Regulations, AIDARs, Prime Contract, Task Order, and direction of the Contracting Officer.	We reviewed the documentation provided by Tetra Tech and determined that their actions and policies and procedures represented sufficient controls. We concluded the Tetra Tech put in place proper corrective actions.
10	Information about subcontracts and sub awards greater than US\$25,000 were not available publicly on the	Tetra Tech has been in discussions with the AESP COR and CO regarding the inputting of the FFATA data for Task Order 01. As of the date of this submission to USAID, USAID has not enabled Task Order 01 in the	We reviewed the documentation provided by Tetra Tech and determined that this control has not yet been fully implemented. We concluded the Tetra Tech has not properly put in place the proper corrective actions.

Number	Prior Audit Findings	Tt Response to Prior Audit	FY 2014 Audit Finding
	Federal Sub award Reporting System (FSRS)	FFATA reporting system and, as a result, Tetra Tech cannot enter any data required by FFATA even if FFATA subsequently had been added to the Contract by formal amendment. Tetra Tech will ensure that all FSRS information is reported in compliance with the requirements of the Federal Acquisition Regulations, AIDARs, Prime Contract, Task Order, and direction of the Contracting Officer once USAID has enabled Task Order 01, and any future Task Orders issued, in FFATA.	
11	Specially Designated National (SDN) list review was not conducted	Additional training of the AESP project office CCN Procurement staff in procurement and contract compliance practices has been implemented, along with enhanced periodic quality assurance reviews of all procurement and subcontract management files. Such training will be standard operating practice on all future USAID task orders. Tetra Tech will ensure that all SDN list reviews will be conducted in compliance with the requirements of the Federal Acquisition Regulations, AIDARs, Prime Contract, Task Order, and direction of the Contracting Officer.	We reviewed the documentation provided by Tetra Tech and determined that their actions and policies and procedures represented sufficient controls. We concluded the Tetra Tech put in place proper corrective actions.

1.3.1.2 Table 3.2: Audit Summary- New AESP Findings for FY 2014

Number	Finding	Tt Response	Action
1	Several costs billed to the project were not adequately supported by documentation	Tetra Tech is now providing all of the requested proof of payment and other documentation for each of the Auditor's seventeen questioned cost items. Tt therefore does not need to	Tt has provided the auditors with approved invoices for all the questioned items during the audit fieldwork period.

Number	Finding	Tt Response	Action
	and proof of payment.	reimburse USAID for any of the in direct costs.	

2.0 COLLABORATION WITH GIROA, OTHER DONORS, OR OTHER USAID PROJECTS

2.1 LINKS WITH RELEVANT GIROA MINISTRIES

Tt AESP collaborated with DABS on numerous projects including the NEPS-SEPS connector, Salang Tunnel Substation, electrical equipment manufacturing facility assessments and the Tarakhil Thermal Power Plant. In addition, Tt AESP provided assistance to, and coordination with, DABS commercial contractors; GFA Consulting Limited and Phoenix.

2.2 LINKS WITH OTHER DONOR AGENCIES

AESP continues to take direction from USAID while coordinating with other donor agencies. AESP attended Working Power Coordination Meetings with USAID, World Bank, Asian Development Bank, and KfW Entwicklungsbank to plan and support future power coordination within Afghanistan.

2.3 LINKS WITH OTHER USAID PROJECTS

No significant events or activities to report during the quarter.

3.0 MANAGEMENT AND ADMINISTRATIVE ISSUES

3.1 PERSONNEL

Tetra Tech had a few noteworthy personnel changes during Quarter 1. The expatriate Transportation Specialist position was vacated and filled by an employee from Tt Framingham. The expatriate Technical Support Manager position was vacated and filled. Also, the expatriate MIS Manager position was vacated and filled. The Contracts Manager position and the Finance Manager position were combined into a single Operations Manager position. The Lead Electrical Specialist position was vacated during this quarter. Replacements for the Lead Electrical Specialist and Operations Manager have been approved by USAID. The two replacements will mobilize at the beginning of the second quarter.

Tetra Tech's local national (LN) Senior Subcontract Specialist received an offer from USAID and started working there. Our Internal Auditor, Civil Engineer, Architect, and IT Manager received their Special Immigration Visas (SIVs) and departed for the United States. These positions were backfilled by the Financial Analyst, Civil Engineer, Civil Structural Engineer, and IT Manager respectively. Lastly, Tetra Tech hired a Senior Mechanical Engineer to support the engineering team, especially for works at the Tarakhil Power Plant.

During this quarter Tetra Tech AESP promoted two LN Senior Engineers to the position of Project Engineer. These two will lead the Electrical and Civil groups. Also illustrating AESP's commitment to capacity building; LN Managers are now running Tt's Kabul Finance, IT, Contracts, HR, and Facilities departments under the supervision of the expat Operations Manager.

Gender Equality plays an important role in staff planning at the AESP. Through WO-LT-0042 Afghan Women Internship Program, Tt AESP selects four interns to support AESP each academic year. The AESP Woman Internship Program was ongoing successfully through this quarter, and the 2014 academic year will conclude in January 2015.

During the first quarter, Tt AESP maintained a male to female ratio of 64% Male and 36% Female employees. Tt AESP will continue to support USAID's Gender Equality and Female Empowerment directive through the remainder of the task order.

3.2 ADAPTION OF THE ACTIVITY

There have been no adaptations of the activity during the first quarter of FY2015. However, the AESP COR has requested the development of a new interim quality assurance (QA) monitoring and evaluation services work order. Changes in the AESP contract LOE will be required to accommodate this QA work order in the coming year. The new QA work order will require increased staffing and it will add QA monitoring and evaluation services to AESP's current design focus.

3.3 MODIFICATIONS AND AMENDMENTS

This quarter AESP has had no modification or amendments to Contract No. EDH-I-00-08-00027-00 Task Order No. 1. Modifications to the LOE, specific contract wording regarding salary adjustments, period of performance and budget have been discussed with the CO, and official modifications should be expected in the second or third quarters of FY 2015.

4.0 SUCCESS STORIES

Following is Tetra Tech AESP's Success Story for FY15 First Quarter about the NEPS-SEPS connector.



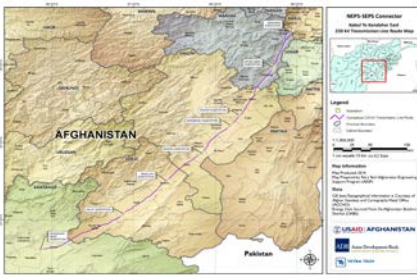
USAID
FROM THE AMERICAN PEOPLE

AFGHANISTAN

SUCCESS STORY

Electricity for All in Afghanistan

USAID finishes NEPS-SEPS designs to create a backbone for power in Afghanistan



Map illustrating the location of the NEPS-SEPS connection. The included transmissions lines and substations will bring electricity to previously unreachable areas of Afghanistan.

[[Map: Hamayoon Amanzai]]

After years of war and no electricity for many in Afghanistan, USAID has completed the base work for the NEPS-SEPS transmission connector; providing hope for change to those in the dark

Afghanistan's infrastructure has not fully recovered from the devastation of war. Coupled with little investment in infrastructure, only 41% of Afghanistan's citizens have access to reliable electricity. Most of these people live in large cities and the capital, Kabul. Thus, most rural Afghans are without power and the basics of modern life.

USAID has completed design plans repairing and extending the Northeast Power System (NEPS) in Northern Afghanistan and connecting it to the Southeast Power System (SEPS). This will create a new backbone for Afghanistan's power and bring electricity to people in rural areas who have never had electricity before.

Afghanistan does import energy from Uzbekistan and Tajikistan, however the two countries have energy systems that are incompatible. As a result, USAID had to develop intricate plans allowing these two systems to work together to extend power within Afghanistan between the two countries.

Design plans include the repair, expansion, and creation of approximately 450 kilometers of 220kV transmission line running from: Dasht-E-Barchi to Kandahar East. USAID has also designed 7 new 220kV/20kV substations from Arghghandi to Kandahar East which includes Sayedabad, Ghazni, Qarabagh, Moqor/Gelan, Shah Joy, Qalat, and Kandahar East substations.

These design packages are the outcome of 2 years of work. The construction of the project will begin in 2015 and is expected to be completed by mid-2018. In the end, USAID will have contributed over \$450 million towards stable power in Afghanistan.

Despite challenges with security, rough terrain, and a harsh winter season; at the completion of the project, thousands in Afghanistan will be able to turn on a light switch and enjoy stable electricity for the first time.

USAID/Afghanistan

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